

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of diagnosis comprising:
 - (a) providing a biological sample from a human identified as being in need of treatment with ~~a therapeutic agent that is transported by OATP-C~~ rosuvastatin, wherein the sample comprises a nucleic acid encoding OATP-C;
 - (b) testing the nucleic acid for the presence, on at least one allele, of either
 - (i) a codon encoding alanine at the position corresponding to position 174 of SEQ ID NO:1, or
 - (ii) an allele of a polymorphism in linkage disequilibrium with (i); and
 - (c) if either (i) or (ii) is found in at least one allele, diagnosing the human as likely to have reduced ability to transport ~~the therapeutic agent~~ rosuvastatin into liver cells.
2. (Withdrawn) A method according to claim 1 wherein the polymorphism of (b)(ii) is -26A>G, -118A>C, -309T>C, -878A>G, -903C>T, -1054G>T, -1215T>A, or -1558T>C, all of SEQ ID NO:2; or T2122G, C2158T, A2525C, or G2651A, all of SEQ ID NO:3.
3. (Withdrawn) A method according to claim 1 wherein the polymorphism of (b)(ii) is selected from -118A>C and -1558T>C of SEQ ID NO:2.
4. (Currently amended) A method according to claim 1, wherein ~~the therapeutic agent is a statin~~, the human is being treated with one dose level of rosuvastatin and step (c) further comprises diagnosing the human as suitable for titration to another higher rosuvastatin dose level

~~comprising monitoring for a decrease in benefit-risk ratio resulting from the reduced ability to transport the statin into cells if either (i) or (ii) is found in at least one allele.~~

5. – 6. (Canceled)

7. (Currently amended) A method according to claim [[5]] 1 wherein the human is being treated with at least 5 mg of [[a]] rosuvastatin daily.

8. (Currently amended) A method according to claim [[5]] 1 wherein the human is being treated with at least 10 mg of [[a]] rosuvastatin daily.

9. (Currently amended) A method according to claim [[5]] 1 wherein the human is being treated with at least 20 mg of [[a]] rosuvastatin daily.

10. (Currently amended) A method according to claim [[5]] 1 wherein the human is being treated with at least 40 mg of [[a]] rosuvastatin daily.

11. (Currently amended) A method of diagnosis comprising:

(a) providing a biological sample from a human identified as being in need of treatment with ~~a therapeutic agent that is transported into cells by OATP-C~~ rosuvastatin, wherein the sample comprises an OATP-C polypeptide;

(b) determining whether the amino acid of the OATP-C polypeptide corresponding to position 174 of SEQ ID NO:1 is a valine; and

(c) if the amino acid is not a valine, diagnosing the human as likely to have a reduced ability to transport ~~the therapeutic agent~~ rosuvastatin into liver cells.

12. (Currently amended) A method according to claim 11, wherein ~~the therapeutic agent is a statin~~, the human is being treated with one dose level of rosuvastatin and step (c) further

comprises diagnosing the human as suitable for titration to another, higher rosuvastatin dose level ~~comprising monitoring for a decrease in benefit-risk ratio resulting from the reduced ability to transport the statin into cells if the amino acid is not a valine.~~

13. (Withdrawn-Currently amended) A method according to claim ~~[[12]]~~ 11, the method further comprising ~~measurement of~~ measuring the level of OATP-C polypeptide expression with ~~valine and/or alanine at position 174 whereby to determine the presence or absence of -118A>C polymorphism in OATP-C nucleic acid.~~

14. (Withdrawn-Currently amended) A method according to claim ~~[[12]]~~ 11, the method further comprising ~~measuring OATP-C polypeptide for presence or absence of OATP-C *15 allele whereby to determine the presence or absence of -118A>C polymorphism in OATP-C nucleic acid~~ determining, in a sample of nucleic acid from the human, the presence or absence, on at least one allele, of a cytosine at the position corresponding to -118 of SEQ ID NO:2, wherein the presence of the cytosine, combined with the determination that the amino acid of (b) is not a valine, is a further indication that the human is likely to have reduced ability to transport rosuvastatin into liver cells.

15. (Currently amended) A method according to claim ~~[[12]]~~ 11, wherein the amino acid at position 174 is determined to be alanine.

16. – 17. (Canceled)

18. (Currently amended) A method according to claim ~~[[16]]~~ 11, wherein the human is being treated with at least 5 mg of ~~[[a]]~~ rosuvastatin daily.

19. (Currently amended) A method according to claim ~~[[16]]~~ 11, wherein the human is being treated with at least 10 mg of ~~[[a]]~~ rosuvastatin daily.

20. (Currently amended) A method according to claim [[16]] 11, wherein the human is being treated with at least 20 mg of [[a]] rosuvastatin daily.

21. (Currently amended) A method according to claim [[16]] 11, wherein the human is being treated with at least 40 mg of [[a]] rosuvastatin daily.

22. (New) A method according to claim 1, wherein the nucleic acid is tested both for the presence, on at least one allele, of a codon encoding alanine at the position corresponding to position 174 of SEQ ID NO:1 and for the presence, on at least one allele, of a cytosine at the position corresponding to position -118 of SEQ ID NO:2.